THE

MEDICAL AND SURGICAL REPORTER.

No. 546.] PHILADELPHIA, AUGUST 17, 1867. [Vol. XVII.—No. 7.

Original Department.

Lectures.

A LECTURE ON ACUTE BRONCHITIS.

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I. Causes of Acute Bronchitis.

Like other portions of the breathing apparatus, the bronchia is subject to acute and chronic inflammation. In our climate, both forms of the disease are very common. The essential feature of the disease consists in an inflammation of the bronchial tubes, and is commonly produced by cold and moisture, applied generally or locally, as by means of damp clothing, or exposure to a cold, moist, variable atmosphere, especially, after the body has been overheated by exercise or crowded rooms.

The acute form of bronchitis is frequently induced by direct and local irritation, such as the inhalation of metallic dust and gases. The accidental inhalation of chlorine gas will sometimes cause the most severe bronchitis. Dr. Charles T. Jackson, the distinguished chemist of Boston, nearly lost his life on one occasion by an attack of acute bronchitis, caused by the sudden inhalation of chlorine gas. Ipecac. in powder, when inhaled by some individuals, will cause bronchitis. The dust of newly cut hay, and the pollen of the *rag weed*, in some persons will produce the same effect.

The flowering of roses, in some persons, will spoil the month of June. Indeed I am acquainted with a celebrated physician, who for years, has been unable to attend to his business during this month, in consequence of severe bronchitis, produced by the inhalation of dust, exhaled from the foliage of growing plants and trees. I have for several years prescribed for a gentleman, who has bronchitis every season, when the *smart weed* is in bloom. One summer he escaped it by going to sea. Hooping cough is no doubt a certain form of bronchitis, induced by a specific morbid poison directly on the bronchial mucous membrane.

A very severe form of bronchitis often accompanies some of the eruptive fevers, measles, scarlatina, and small-pox, constituting a most dangerous and sometimes fatal complication. In measles, the recession of eruption is frequently followed by a great increase in the bronchial disorder, which is announced by the great increase of cough, and sudden oppressive dyspnœa. From the suddenness of the production and disappearance of the latter symptoms, which is occasionally observed in the cases, it has been suggested, that it is possible they may be rather congestive, than inflammatory, although if the congestion continue, bronchitis is the final result.

There are also many chronic diseases which may be said to favor the development of acute bronchitis, these are Bright's disease of the kidneys, and diseases of the heart and lungs. It often occurs during the progress of pulmonary tuberculosis, and sometimes proves very fatal to the patient.

II. General Symptoms, and Physical signs of Acute Bronchitis.

The general symptoms of acute bronchitis are such as attend other inflammatory attacks of the breathing apparatus, although commonly not so severe as when the pleura or pulmonary tissue are affected. The patient is first taken with rigors, which is soon succeeded by fever, thirst, headache, pain in the back and limbs; scanty urine; white tongue, with red edges; quick and hard pulse; hurried respiration, often accompanied with a feeling of great dyspnœa, and a hard severe cough, with a tenacious mucous expectoration, which are increased in severity on the least exertion.

There is usually pain in the chest, mostly referred to the sternum, but is not so sharp as that of pleuritis. At first the expectoration is either absent or very scanty; as the disease progresses it becomes more copious, glairy or frothy, and sometimes streaked with blood, and its expulsion gives very little relief to the cough and dyspnœa. Under the microscope it presents mucus corpuscles, pus cells, and epithelium in abundance. As a general thing the expectora-

tion is increased in quantity in the evening, when there is usually an aggravation of all the symptoms, more especially the cough, dyspnœa and fever.

If, at this stage of the disorder, relief be not obtained by prompt remedial measures, there speedily come on feelings of great depression; the pulse is weak, as well as very small, frequent, and sometimes very irregular; the functions of the brain are impaired or disturbed; the muscular strength is much reduced; the countenance becomes anxious, or partially livid, according to the quantity of blood in the system; profuse perspiration appears upon the body; the urinary excretion becomes very scanty; the tongue loaded with a brown fur; the thirst very intense; cold extremities; the vital powers fail, and the patient falls a victim to the malady.

In favorable cases, the disease commences to decline between the fifth and eighth day; the dyspnœa is diminished, and is confined mostly to the evening, when there is always a marked tendency to exacerbation; the sputum is opaque, and less glutinous and frothy, and on being expectorated, gives more relief to the cough, and dyspnœa. The respiration becomes less frequent, the countenance improves, and resumes its proper color; the pulse falls to its natural standard; and the patient soon becomes convalesent.

The physical signs in uncomplicated bronchitis are very marked, and need not be mistaken by any one. In the first stage we have extensive *sonorous rhonchi* on one side of the chest, and not unfrequently on both sides. When the disease is fully established, the rhonchi become *mucous* and *sub-mucous*, reaching to the inferior portion of the lungs, with a weakened respiratory murmur, announcing the presence of inflammation, even in the small tubes; but the clear sound on percussion declares the vesicular structure still free.

The *sonorous rhonchus* is produced by the thickening of the mucous membrane of the larger portion of the bronchial tubes, which contracts their calibre, and thus impedes the free passage of the air. The sub mucous, or more properly the *sibilant rhonchus*, is caused by the same physical condition as the sonorous, but differs from it on account of the small calibre of the tubes in which it occurs. After the bronchial inflammation has attained its climax, glairy mucus is frequently secreted in large quantities, and being mixed with bubbles of air that pass through it in respiration, gives rise to the *mucous rhonchus*.

III. Anatomical Pathology of Acute Bronchitis.

So far as we are acquainted with the pathology of this disease, the chief lesion is confined to the mucous membrane, and not to the subjacent tissue, and is found to consist mostly in injection, thickening and induration of the membrane. When the attack has been mild, there is commonly found a circumscribed redness, in some portion of the membrane, especially at the termination of the trachea, and the first division of the bronchia; but in the termination of the latter, which are rather serous than mucous, this appearance is seldom met with, according to Rokitansky; see his "Manual of Pathological Anatomy," vol. iv, p. 21, Syd. Soc. Ed.

When the inflammatory action has been more severe, the redness extends to a greater number of tubes, and the superior tubes appear to suffer the most. The fine injection on which the redness chiefly depends, seems to exist both in the mucous membrane and in the sub-mucous cellular tissue. Sometimes the redness diminishes progressively from the larger bronchia toward the small ones; at other times the reverse is met with. This is especially the case, where the bronchitis is secondary to pneumonia or tubercular disease of the lungs. I have met with many instances of this kind in phthisis, where the inflammation was confined exclusively to the smaller tubes, no redness nor any other abnormal appearance presenting itself in the large bronchia. Again the redness sometimes presents itself in circumscribed patches, similar to those met with in muco-enteritis, wherein apparently healthy portions of mucous membrane are found between them.

Induration and ulceration very rarely take place in this form of bronchitis, although they are by no means unfrequent in the chronic form of the disease. When ulceration is present it is commonly confined, almost exclusively, to those cases which have a specific character, such as bronchitis, complicatory measles or small-pox. In these cases the ulcers are at first confined to the mucous follicles, although they sometimes extend themselves until these acquire an irregular outline, involving the surrounding membranes. These ulcers are found principally in the larger tubes, where the follicles are well developed, and rarely extend to the minute ramification of the tubes.

When the chest of an individual is opened, who has died with acute bronchitis, the lungs do not in general collapse, the escape of air being prevented by the obstructions of the bronchia. These obstructions consist mostly of a quantity

of frothy liquid, similar to that expectorated before death. Sometimes this liquid is mixed with bloody serum; but this is not commonly found in the matter expectorated, and is no doubt exuded from the engorged blood vessels just after dissolution. Purulent matter is also occasionally seen in very acute cases, which have proved fatal within four or five days.

But it should be borne in mind that acute bronchitis sometimes proves fatal, without leaving any visible pathological lesions. The redness and thickness of the mucous membrane entirely disappearing after death, the same as the redness and swelling in the dermal structure, when the patient has succumbed to erysipelas. Nearly every physician of extensive experience has met with examples of this kind. I once saw a little babe die with general cutaneous erysipelas, and ten minutes after death, the redness and swelling of the skin had entirely disappeared. Its mother had perished a few days before, with puerperal fever.

IV. Diagnosis of Acute Bronchitis.

This is commonly very easy; indeed, where it exists in its primary form, there is little danger of confounding it with any other disorder of the chest, excepting pneumonia; and even here there is no necessity for mistake, if due caution be exercised. The distinction between the two diseases is to be looked for partly in the expectoration, and then in the absence of the characteristic physical signs of pneumonia. In pneumonia we have the *rusty sputa*, which is rarely present in acute bronchitis. I have met with it a few times in cases of secondary bronchitis, where the disease was the result of valvular obstruction in the heart, and in some cases of BRIGHT'S disease of the kidney. I recently saw a gentleman afflicted with the latter disorder, suffering from a very alarming attack of acute bronchitis, whose expectoration was quite rusty.

The chief physical signs of pneumonia are dullness on percussion and crepitation. In acute bronchitis we have little or no dullness on percussion, and if crepitation is present, it is quite a different thing from what we meet with in pneumonia. In the latter disease it is of a much finer quality than in the first, and if only heard for a day or two, without dullness on percussion or rusty sputa, it may be considered as a pretty sure indication that the parenchyma is not involved in the inflammation. Sometimes, however, the two diseases exist together, and render the case more serious and the diagnosis more difficult. But it should be remembered, that notwithstanding the distinction, we attempt to make out in the physical signs of these two diseases, the physical condition of a congested lung with acute bronchitis, and of a lung in the first stage of pneumonia, are the same as regards the physical signs, and can be distinguished only by the different courses which they take, and which will depend on the degree of inflammatory tendency present, as indicated by the cough and fever. I think it may be stated as a general thing, that the constitutional symptoms are more severe in acute pneumonia than bronchitis; that while in the first the patient is so ill that he is obliged to keep his bed, in the latter he is still able to walk about his room, if not to get out of doors.

V. Prognosis of Acute Bronchitis.

The prognosis of this disease is favorable, but not always so. In the aged and in young children it sometimes proves fatal. When it attacks aged people in feeble health, you should be very guarded in your prognosis. In this class of individuals it is more dangerous, because it is apt to terminate in pneumonia, which is a very fatal complication to persons in advanced life. In young children, the danger depends almost entirely on the same disposition to inflammation of the minute structure of the lungs. Aged people and children have too little vital power to sustain the combined shock of the two diseases. The lungs of the aged are also generally in a more or less emphysematous condition, and therefore, can ill afford any infringment on their functions.

It may, however, be stated as a general rule, that when the bronchitis is primary and partial, affecting a few bronchia only, and without much fever and dyspnœa, it will terminate favorably in a few days; and its disposition to pass off is indicated, as we have observed under the head of general symptoms, by the expectoration becoming opaque and more clotted, and gradually diminishing in quantity. This change is always first seen in the morning; the evening exacerbation often restoring the thin glairy character to the sputa, even in cases tending to convalescence.

Relapses are very common in this form of the disease, and are marked by the expectoration always assuming the character just stated, and by an increased hardness of the cough and fever. Sometimes it will be announced by prolonged and severe chills, when all the general symptoms will become more aggravated than in the first instance, and the case assume a more grave aspect. If the disease does not now prove fatal, it may pass into the chronic form, and terminate in permanent structural alterations in the bronchial tubes, which may ever afterward be a

source of serious embarrassment to the healthy performance of the functions of respiration.

In the more extensive attacks of disease, where the dyspnœa is very oppressive and constant, and particularly where the fever is high, and the patient is delirious in the beginning, the prognosis must be somewhat doubtful. If the acute symptoms have already yielded to the state of collapse, it may well be feared whether the vital powers of the system will be sufficient to repair the damage which the disease has inflicted upon the suffering structures. The extreme anxiety of the pallid countenance, with the more or less lividity of the lips, of the face and hands, with coldness of the surface, and a rapid fluttering or thready pulse, announce the suffocating effects of this stage of the disease; and the universal mucous rhonchus becoming coarser and more gurggling as the expectoration fails, with little or no respiratory murmur heard on applying the ear to the chest, give direct evidence of impending dissolution.

VI. Treatment of Acute Bronchitis in Children.

The treatment of this disease must always be modified by the form of the disorder and the age of the patient. In the bronchitis of children, you will find emetics and mercurials useful in nearly every stage of the malady. Among the first class of remedies, ipecac. ranks the highest.

This may be given in the form of powder or syrup. When the fever is high, the patient should be placed in a warm bath, after which sufficient ipecac. may be given to produce vomiting, particularly if there is much mucus in the bronchial tubes. In most cases, however, it will be found more useful in smaller doses, combined with calomel and soda, administered according to the following formula:

℞ Hydro. chlo. mite, gr. vj.
Pulv. ipecac., gr. iij.
Sodæ bi-carbonas, gr. xxiv. M.
Div. in chart No. 6.

One of these powders may be given to a child two years old, every three hours until the bowels are freely moved. After which they may be given at longer intervals, and the calomel may be reduced to one-fourth of the quantity, or omitted altogether. Sometimes after the bowels have been freely moved, I substitute the following, with the most happy effect:

℞ Syrup. ipecac., f.℥ss.
Tinct. digitalis, f.℥ss.
Sp. æth. nit., f.℥iss.
Tinct. opii camph., f.℥ij.
Syrup. simplic, f.℥j. M.
Sig. A teaspoonful every four hours.

In cases which do not yield at once to the remedies just named, you should resort to counter-irritants to the chest. Dr. Chambers speaks very highly of the *mush jacket*, others recommend mustard poultices, but in very young children, I think you will find a liniment made according to the following, more useful.

℞ Pulv. camphor, f.℥ss.
Ol. terebinth., f.℥ij.
Ol. olivæ, f.℥iij. M.

This may be applied to the breast by means of flannel thoroughly saturated with it, which should be covered with a piece of oil silk, and securely kept in place by a thin roller. In older children, where the disease has extended to the smaller bronchia, and appears to be obstinate in its character, you should blister by all means. I could relate scores of cases where the timely application of a blister has cut short the inflammation and saved the life of the little patient when every other means had failed. It is a severe remedy, it is true, and parents often object to its use, but this is no reason why it should be neglected, when the symptoms clearly point out the necessity of its employment.

In the management of children suffering under acute bronchitis, there is one thing which I wish to call your attention to, that should never be eglected. It is this; NEVER ALLOW YOUR PATIENT TO REMAIN TOO LONG IN ONE POSTURE. All of our best medical writers caution against this. Patients suffering with this disease are naturally inclined to lie upon the back. This posture causes the mucus to gravitate to the posterior and inferior portion, and accumulating in the small tubes, congestion in the air-cells is produced, and the ultimate result is lobular pneumonia. The child should not be allowed to lie in one position more than two hours. This may appear a small matter, but you will find by experience, that your success will not be very flattering, in treating the acute bronchitis of small children, if you neglect it.

VII. Acute Bronchitis in Adults.

If the patient is robust, and the attack very acute, attended with a frequent and hard pulse, hot and dry skin, costive bowels, laborious breathing, and a troublesome dry cough, you should not hesitate a moment to take twelve or fifteen ounces of blood from the arm, the opinion of Todd, Bennet, Flint, and the whole school of modern innovators, to the contrary notwithstanding. The speedy relief afforded to all the pressing symptoms will be an ample compensation for the loss of a few ounces of the vital fluid. If bleeding has no influence in curing the disease, the wonderful influence it has in mitigating the patient's

sufferings, places it far beyond every other known therapeutical agent.

After bleeding, if the skin remains hot and dry, the patient may be treated to the alcoholic fumigating bath, and one of the following powders given every four hours, until the bowels are freely moved.

℞ Podophyllin, gr. j.
Hyd. chlor. mit., ʒi.
Potassæ nit., ʒss.
Pulv. ipecac., gr. viij. M.
Ft. in chart No. 4.

If, after the bowels have been freely moved, the skin should remain hot and dry, the patient may again be subjected to the fumigating bath, and a teaspoonful of the following mixture administered every two hours, until free perspiration and expectoration are produced:

℞ Tinct. verat. viride, f.ʒss.
Syrup scillæ comp., f.ʒiij.
Spts. æth. nit., f.ʒss.
Ext. lobeliæ, fluid., f.ʒij.
Tinct. opii camph., f.ʒss. M.

If this should produce nausea and vomiting after a few doses, it will commonly prove very beneficial. After free expectoration has been produced, it may be given at longer intervals, or it may be superseded by the following:

℞ Tinct. sanguinariæ, f.ʒij.
Vin. ipecac., f.ʒj.
Morphiæ sulph., gr. ij.
Syrup. simplic, f.ʒj. M.
Sig. A teaspoonful every six hours.

To relieve cough and produce rest at night, do not neglect to give your patient eight or ten grains of Dover's powder early in the evening.

If the disease should still prove obstinate; if dyspnœa and cough still continue urgent, and the patient complains of great weight upon the chest, with a deep burning pain just under the sternum, you should immediately apply a blister just over the seat of the difficulty. It will almost invariably relieve all the pressing symptoms just named, cut the disease short, and secure to the patient a safe and speedy convalescence.

After the disease has passed its climax, very little medical treatment is demanded. If the cough should remain troublesome, and the expectoration scanty and tenacious, I am in the habit of prescribing the following:

℞ Ammoniæ bromidi,
Ammoniæ iodidi, āā ʒij.
Morphiæ sulph., gr. ij.
Syr. phellandrii aquatici comp., f.ʒviij. M.
Sig. Two drachms every six hours.

VIII. Treatment of Acute Bronchitis in the Aged.

Vegetable emetics in small doses, and expectorants, especially those of a stimulating nature, are the most valuable remedies in this case; of all the vegetable expectorants, you will find the polygal senega the best in this disease, as it commonly prevails among aged people. The best method of extracting its virtues is by decoction. Two fluid ounces of the officinal preparation should be administered every four or six hours, according to the necessities of the case. If the patient is weak and debilitated, five grains of the carbonate of ammonia and two grains of quinia may be added to each dose. In addition to the above, your patient will frequently derive much benefit from a small glass of ale three or four times a day. It is a mild stimulant, expectorant, and anodyne, and is much to be preferred to wine or ardent spirits. In bad cases of acute bronchitis in the aged, never hesitate to blister. In mild cases you may use the camphorated liniment with turpentine, as a counter-irritant.

After the violence of the disease has passed, tonics and expectorants should be freely used. The following you will find a useful expectorant:

℞ Syrup. scillæ,
Syrup. senegæ,
Syrup. ipecac., āā f.ʒss.
Morphiæ sulph., gr. ij.
Syrup. simplic, f ʒiss. M.
Sig. A teaspoonful every six hours.

IX. Treatment of Secondary Acute Bronchitis.

This is similar to that of the primary form, and consists in the use of antiphlogistics, expectorants, and diaphoretics; these may at all times be prescribed to meet the wants of each case. In measles, for example, the chief danger, both in the first stage and the eruption, is from acute bronchitis, the severity of which will guide us very much in the use of active antiphlogistics. About fifteen years since, the measles prevailed very extensively in my practice, and secondary bronchitis was very common. Bleeding was the only remedy that appeared to be attended with any special benefit. Every adult patient that was bled freely, speedily recovered, while those who were not, lingered for some time, and some few of them never recovered. Ten years later, the same disease prevailed in my practice, acute bronchitis was a frequent complication, but in this visitation bleeding was not attended with the same benefit. In some cases it appeared to be positively injurious. Hence you discover the necessity of regulating medical treatment to suit the form of disease, as we meet with it in different constitutions and epidemics.

Communications.

PULMONARY CONSUMPTION AND ELECTRICITY.

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Consumption being a disease both terrible and of frequent occurrence, in the treatment of which almost every conceivable remedial measure has at some time or another already been tried, and electricity being a mysterious and powerful agent, the therapeutical use of which, in almost every conceivable disease, has been commended by some one or another—it would be strange if the proposal to employ electricity in the treatment of consumption were novel. To show that its use can be based on rational grounds, (which is not usually done,) and how it should be applied is the object of this brief notice.

From the standpoint of the medical science of to-day, the question, "Is phthisis pulmonalis preventable?" and "Is it curable?" must both be answered in the affirmative, as positively and indubitably as the preventability and curability of any disease can be affirmed. Yet in spite of the invocation of medical art, thousands and thousands continue, year after year, to die from consumption. Indeed from one-sixth to one-eighth of the total mortality among us is caused by its ravages. Why is it that the achievements of practice have, so far, fallen behind the teachings of physiology and pathology? That it is due in great part to the theory of tubercle and infiltration of Lænnec—which, on account of his brilliant contributions to the knowledge of pulmonary disease, was received almost unquestionably by the medical world, and which is now, unfortunately, a portion, so to speak, of the flesh and blood of the mass of practising physicians—leading to the indiscriminate nomenclature of tuberculosis to designate pulmonary consumption, with all its erroneous, paralyzing, and injurious consequences, as to prophylaxis and treatment, is certain; but other causes coöperate.

It cannot be denied that a state of general debility precedes or accompanies consumption. This must arise from inadequate or vitiated nutrition, and undoubtedly calls for efforts on the part of the physician to raise the physical condition of the whole system to the highest possible vigor. Every organ must be made to attain the condition of utmost health and strength of which, under the circumstances, it is capable; and this does also apply to the organs of respiration.

The strength of an organ is manifest from the manner in which it reacts upon the application of its peculiar stimulus. When with average moderate quantities of the latter, it performs its functions normally, the organ is said to have normal strength; when it continues to do so with undue (*i. e.*, either very large or very small) quantities, it is very strong; when the effect of moderate quantities of its natural stimulus is to disorder the function, the organ is weak; and when very small quantities even are badly borne, it is very weak. Thus, eyes are strong when objects are distinctly seen at different distances and with a moderate amount of light; they are very strong when they can continue to perform their function with impunity with very much or very little light; they are weak when moderate quantities of light disorder vision; and when an even slight quantity of light is painful to the eyes, they are extremely weak. Thus also of the lungs and other organs.

The strength of all our organs is preserved by proper exercise; they are weakened by insufficient, and exhausted by excessive exercise. The two conditions, weakness and exhaustion, are often confounded, because the extremes meet in their effects. A weakened organ is strengthened by appropriate exercise, *i. e.*, by subjecting it methodically to suitable proportions of its natural stimulus.

In cases of threatened or incipient consumption, the respiratory organs are weakened, and we have (to use the language of Dr. Ives, in his recent address to the Connecticut Medical Society, published in its Transactions of 1866) "the following means by which to insure the health of the lungs and the body in general. First, bearing upon the lungs directly, deep methodical inspirations and the special development of the respiratory muscles; secondly, upon the lungs and the whole system conjointly—active muscular exercise, the free use of fresh air, a diet nutritious and digestible, and suitable care and protection of the skin." And in cases in which consumption has already made some progress, the same means still prove strengthening, preservative, and curative. We have beneficently been endowed with so large an amount of lung tissue, that, as my good old preceptor used to say, and I verily believe, two-thirds of it might be dispened with, and yet respiration be carried on, sustaining life. The progressiveness of disease and the irritation and drain upon the whole system, are, it is well known, the most fruitful

sources of interference with health and strength in consumption. Aside from the actually diseased or destroyed lung tissue, we have to do with portions of lung not yet involved in the specific process, but still already weakened, and to these we must bring strength, to enable them the better to perform their necessary function, and resist the destructive progress of the disease. And this is the cause of the great benefit derived from pulmonary and systemic gymnastics; it proves to the weak lung-portions and to the whole system *a gradual but persistent tonic.*

All conversant with the subject agree as to the *value*, though not as to the *modus operandi* of muscular gymnastics as an aid in the treatment of consumption, no matter, also, in how many other particulars as to pathology or therapeutics they may differ. Now there are various kinds of muscular gymnastics, according to the source whence the contraction or action upon the muscle is derived. Thus, use has been made of *volitionary gymnastics*, viz., muscular contractions produced by movements dependent on the will, such as walking, movement of the arms, voluntary deep inspiration, etc. There are also instances of *chemico-vital* and *physico-vital* muscular gymnastics in the effects produced by certain drugs upon muscular fibre, such as astringents, ergot, and many emetics and purgatives upon the muscular fibres of the stomach and bowels, etc. Then there is what has been termed *moral* or *emotional gymnastics*, by which the heart and the circulating systems are mainly affected. Again, we have *mechanico-passive gymnastics*, including principally muscular action in one person directly produced by another; and finally, the muscular contraction produced by the imponderable agents, heat, light, magnetism, and electricity.

To the subject of *electrical gymnastics* I want to direct the especial attention of the profession. It is one of the most certain and constant sources of muscular contractions for medical purposes. In consumption, it was first methodically introduced by Dr. Bastings, of Brussels, who justly claims for it the following advantages:

1. It can be applied directly to any special muscle or set of muscles which the physician desires to bring under its influence.

2. It can be carried out daily, at all hours and seasons.

3. It does not fatigue or exhaust the patient.

4. It can be employed at all ages and in every condition of debility.

5. It can be applied in the patient's house, in bed, etc.

6. Even when absolute rest is requisite, such as in pulmonary hemorrhage, it may be employed.

7. The injurious influences of the weather and other inconveniences inseparable from other kinds of exercise or muscular gymnastics are avoided.

8. It acts more powerfully and in less time than any other gymnastics.

Applied to the respiratory muscles, it does not increase the pulse. Very small doses suffice, once or twice a day, for five or ten minutes each time. *No painful contractions must be produced.* The current is made to go in the direction of the nerve of the muscle toward its ramifications, *i. e.*, the positive pole is applied where the nerve enters the muscular tissue, and the negative pole is moved about over the whole extent of the organ. Thus the positive electrode is applied on both sides of the spinal column from above downward, while the negative one touches the body and peripheral terminations of the corresponding muscles. In the neck, where a still weaker current should be used than elsewhere, the positive electrode is placed above, the negative below. In the case of the muscles of the chest, the positive electrode is applied near their origin on the humerus, and the negative moved over their whole extent to their insertion at the ribs. The intercostals are electrized by applying the positive electrode along the lower edge of the upper rib, and the negative along the upper edge of the lower rib. In the case of the arm, we must always begin at the deltoid and go toward the hand, and so of other muscles.

Thus applying electricity to the respiratory muscles, produces involuntary and not at all fatiguing deep inspirations; the muscles of the chest are found therefrom to increase in size and power, the cavity enlarges and more air is drawn into the lungs, a more complete oxydation of the blood takes place, a better blood is brought into the circulation, assimilation is improved, digestion stimulated, the appetite increased, and the whole system strengthened.

Applied to other muscles of the body, it takes the place and is a great improvement upon the *passive movement:* "rubbings, or ordinary friction; rollings of the muscles, effected by placing a limb between the hands and rubbing rapidly *across* the axis of the limb; patting the muscles with the palm of the hand, or still better, *hacking* rapidly over the muscles with the edge of the hand," upon which so much stress has been laid, and justly too, for preserving the correct balance between waste and renewal, "*tonicizing*" the tissues and increasing their power of resistance. If Dr. Tooker (on localized bodily movements,

Chicago Medical Journal, December, 1866), has seen "the quick fluttering pulse of hectic, calm down and become regular, and many distressing symptoms disappear temporarily, under an hour's judicious handling in this way [the passive movements, cited above], and permanent benefit follow, by persistence in the treatment," I can assure him that he can observe the same soothing, sedative, and tonic effect often from a few minutes' application of electricity.

I conclude with a further translation from Dr. Bastings' essay, "*De la phthisie pulmonaire:*" To be able to form a correct opinion of what is meant by electrization of muscles for the purpose of strengthening them, it must be understood that the idea is to lead an artificial current into the nerves of the muscles, to supplement, or serve as a substitute for or in addition to, the natural nerve-current when the latter is wanting or does not act with the required force. That in the brain is the source of an imponderable agent analogous to electricity, called '*nerve fluid*,' which is distributed throughout the whole body, following along its conductors, the nerves, and plays an active rôle in all the phenomena of life, is, though an hypothesis, most likely. When supplied to muscles this nerve-fluid causes their contraction, and eventually also an increase in their size and power, and in this respect, electricity is entirely analogous to nerve-fluid, for it also induces muscular contraction and increase in size and strength of a muscle.

Electricity acts upon muscles as a tonic; that is certain. When, therefore, from any cause the thoracic muscles are in a condition of atony, electricity appropriately applied, gives them power; they then act with greater energy, and more thoroughly perform their proper functions, viz., enlarge the thoracic cavity so that as much air can enter as the normal state of health requires. The due quantity of air having been taken into the lungs, aëration (decarbonization) of the blood takes place properly, the normalized blood brings to the whole organism a healthy strength, and thus prevents the final consequences of a shattered constitution.

Other diseases than consumption, when traceable to a weakened constitution, are cured by electricity, as cases of caries of bone, chlorosis, scrofulosis, costiveness, debility in consequence of severe acute maladies, such as typhus, pleuropneumonia, etc. (though the electricity should never be employed while fever, viz., reactionary symptoms last) and some cases of deformities.

It is not claimed that this electrical medication can make up again what has been already destroyed by bad blood, but it is claimed that it can prevent further destruction. It does not remove tubercles already present in the lungs, but prevents the formation or deposition of more tubercles, enabling the lung-portion remaining intact to continue the performance of the function of respiration sufficient for the wants of the system; and this certainly is an immense benefit.

It is obvious that electrical muscular exercise should be employed as soon as the first symptoms of an alteration are observed; then the evil is nipped in the bud, and the development of pulmonary consumption prevented. Employed afterward it prevents progress of the disease.

If by cure of consumption is meant the closing up of cavities, the elimination of tubercles, and the restoration of the lungs to their original condition, *there is* of course *no cure;* but for those who are content to call the disease cured if no further morbid symptoms occur, if the lung tissue left performs its function regularly, and the individual is enabled to follow in all respects his previous occupation,—a cure is possible by the employment of electrical gymnastics. So far it is safe to go, but no further. The cured consumptive may not breathe with the whole lung-power of a perfectly healthy man, but he breathes sufficiently for life, business, and comfort, adapting himself to the circumstances in which he happens to be placed. It is in this as in many other cases; thus, for instance, if a person suffering from caries of bone, is so low that a fatal termination is highly probable, and to save life the amputation of the affected limb is resorted to, the patient recovering thereafter his strength and health—that person is called *cured*, though as far as the limb is concerned, the individual is very far from being in the condition of a perfectly healthy person. Such are cases of cure with a defect.

I omit the relation of cases, and do not enter into minute details of any kind, as my design in this paper is only briefly to call the attention of the members of our society to the use of *electrical "passive movement" in consumption.* Their great advantages readily suggest themselves on but little examination and reflection, and every practical trial will certainly confirm all reasonable anticipation of benefits to be derived from them. I am preparing a complete essay on the pathology and treatment of pulmonary consumption, in which the subject will be taken up again, and considered at great length, and from all points of view.

BROMIDE OF AMMONIUM IN CHOREA AND EPILEPSY.

By H. P. Ayres, M. D.,
Of Fort Wayne, Ind.

Perhaps I only add my testimony to that of many others, when I mention my success with the bromide of ammonium, in treating chorea and epilepsy. I have for many years relied upon some of the preparations of iron, notwithstanding I have used other drugs, in treating chorea. I have as a general thing, looked upon all such cases as very tedious, and often times doubtful in results. By almost universal consent among physicians, some of the preparations of iron have been considered a necessary part of the treatment; and while I yet have a great confidence in it, there are objections to its use, which are not found in the bromide of ammonium. The results from iron are very slow, and usually months are consumed in effecting a cure. Nearly all the preparations of iron are objectionable from the quantity necessary to be taken, and the lack of cleanliness, and neatness in the preparation.

True this objection is somewhat obviated by the various elixers of iron, but I am inclined to think iron in these diseases will be superseded by bromide of ammonium.

The advantages in the bromide of ammonium are—you obtain your results quicker; your medicine is neat and clean, and the doses much smaller.

Case 1st. A strong, heavy-limbed girl, aged ten years, was attacked with chorea, first in the hands and arms, gradually extending over the entire body, so that she ultimately became so helpless, as to be unable to walk, or even feed herself. After attending to the condition of the alimentary canal, and her general health, I put her on the use of iron, which she continued to use for four months, gradually getting better, until she had full control of herself.

She continued free from any symptom of disease for eight months, when it returned, from imprudence in eating largely of candies and rich pastry.

The iron was again resorted to with the same satisfactory results, yet with the same tediousness. An interval of several months again occurred, in which she was entirely well. Again the mother informed me of its return.

I now gave her bromide of ammonium, and in ten days found a decided improvement.

I had in this case the satisfaction of accomplishing in a short time, that which had with the iron, occupied months; and now have every confidence that the disease is permanently removed.

Case 2d. A slightly built girl, aged eleven years, black hair and eyes; usually healthy. Had been epileptic for six years; the attacks occurring every two weeks at first, but gradually becoming more frequent, until they occurred three and four times each week; sometimes the attacks were convulsive, at other times a stupor, with occasional twitching of the muscles of the arms, or one leg.

I treated her with a variety of medicines, but cannot say she was benefited by any.

She commenced the used of bromide of ammonium; the effect was soon apparent, not only in the severity of the paroxysms, but the interval became longer, until there was an entire cessation. She used the medicine six months, and is now entirely free from epilepsy.

Case 3d. A short, plump, curly-headed, sweet girl, aged eight years, was attacked with an involuntary snapping-shut of the eyelids, and contortions of the mouth. The disease gradually extended over the body. She commenced using the bromide of ammonium, and the effect was apparent in ten days. I gave her eight grains, morning and evening, increasing it to ten and twelve grains. The child had for several weeks been under the treatment of iron, and I think she would have recovered by using it, but the effects of the bromide of ammonium were sooner seen, and hence more satisfactory.

Case 4th. A large, tall, sandy-haired man, aged 46. He had been injured by an axe, the edge cutting through the frontal and parietal bones, about one inch above the superior edge of the temporal bone. The depression is three inches long, and at the centre of the wound, or deepest depression, near a half inch deep. From all external appearance, there is a sufficient depression of bone to materially affect the brain.

The injury was received seven years ago, from the hands of an infuriated man. Four years after the injury, he had attacks of insensibility, occurring three or four weeks apart and lasting four or five minutes. These attacks gradually became more frequent, occurring two or three times a week, and attended with some stertorous breathing, and motions of the limbs. After trying various remedies, he was placed under the influence of bromide of ammonium, and I was gratified to find the attacks further apart, and less severe. The last time I saw him he had escaped any paroxysm for six weeks, and only two slight ones in three months. As I have not heard from him for some months I presume he

continues to improve. I commenced with ℈j doses, and gradually increased the medicine until he took ʒij, morning and evening.

Soon after the commencement of the epileptic attacks, the mind suffered from them. He became melancholy and anxious. His nights were wakeful and disturbed; his mind is now cheerful and hopeful, his sleep is good and refreshing, and everything indicates returning health. I have used it in other cases, but those I have reported are sufficient to illustrate my view. Of all the cases, I look upon the last with the greatest interest, and shall continue to do so. It involves the questions,—how far with medicine can the functions of the brain be preserved, when subject to mechanical pressure; or can we relieve epilepsy from such causes without an operation? If the functions of the brain can thus be relieved, may they not be established to some extent, where it has been dormant from birth, or been produced from known causes.

"CHLOROFORM AND ERGOT IN OBSTETRIC PRACTICE."

Reply to Strictures of Dr. T. A. Reamy, published in "Reporter," April 6, 1867.

By Chas. C. Hildreth, M.D.,

Of Zanesville, Ohio.

[Concluded from p. 121.]

As Dr. Reamy has promised your readers a paper on the "Separation of membranes," I will beg leave to refer again to that subject. In my last paper I said, I had never read Dr. Inglis's article on that subject—I am now happy to say I have read it carefully. Those of your readers who wish to see what it contains, will find it in *Braithwaite*—Jan. 1866, page 221. Doctor R. thinks, "I will live long enough to change my views on this subject." I am now happy to say to him, *that I have changed them.*

Before I read the article, I had supposed there might *possibly* be some truth in it. I now think the theory the most ridiculously absurd ever originated by a man making any pretensions to science. The theory of Dr. Inglis is briefly as follows: That a dry labor is directly the result of adhesions between the membranes and uterus; that a rigid os uteri, depends usually upon these adhesions. That in a wet labor, (or one in which there is a fine secretion of mucous,) there are no adhesions to be found. That to convert a dry into a wet labor, and predispose the os to dilate easily, it is only necessary to separate the membranes around the cervix, with the finger, or other instrument.

Now the theory that a dry labor depends upon adhesions between the uterus and membranes, is a most transparent absurdity; for the simple reason that a dry labor can at any time, in twenty minutes, be converted into a wet one, with a fine secretion of mucous, by the use of chloroform alone; and this too, without touching the membranes.

In a tedious labor, we often have the dry and moist condition alternately. This change, may occur several times during the progress of such a labor. If Dr. Inglis' theory is correct, we will of course in such a case have the membranes *adhere*, and *separate*, just as often as the labor becomes wet or dry. A free secretion of mucous in labor, is merely one of nature's preparations to facilitate that process. It may be excited by a variety of causes. The presence of a foreign body within the cervix, invariably excites it. The sponge-tent, the bougie, elastic bag, uterine bolt, the finger, uterine injections, etc., all have this effect. A free secretion of mucus is often the result of mere *mental emotion*, as is often noticed in speculum examinations. How absurd then to attribute this result *always* to separation of membranes. Dr. Inglis tell us, we can get a free secretion of mucus, and muscular relaxation from the rectum, by allowing the bougie or finger to remain in that canal for some time, and that finally, we get expulsive action. By this illustration, he very innocently demolishes his own theory. For if the presence of the finger or bougie in the rectum, should so far stimulate or irritate the mucous membrane, as to excite a free secretion of mucus, why should not the same result follow the introduction of the same foreign bodies into the cervix and body of the womb; surfaces from which mucus is poured out still more easily and freely. If also, the presence of a foreign body in the rectum will excite after a time relaxation, and then expulsive action; why should not the uterus be excited by the same means, to relax and finally expel its contents? This, then, is the rational and sensible explanation of all the phenomena, which Dr. Inglis attributes to separation of membranes. The repeated introduction of the finger, or uterine bolt, (Hamilton's,) acts precisely like any other foreign body; producing irritation, increased nervous and vascular action, a free secretion of mucus, and after a time, dilatation, and regular expulsive pains. A bougie introduced between the membranes and uterus, will produce precisely the same result; yet, (if any existed,) how trifling must be the separation of membranes produced by its introduction. It is worthy of note, that to

produce the desired result in Dr. Inglis' hands, the finger or uterine bolt, requires *very frequent introduction;* usually every twelve hours, for two or three days. Now if the adhesions were the only obstacle in the way of dilatation, or prompt delivery, why would not *one free separation* of them by mechanical means produce as much effect as twenty similar operations? Simply because the fancied adhesions had nothing to do with the cause, nor result.

Mechanical irritation, by the introduction of foreign bodies, explains all the resulting phenomena, in a scientific and rational manner.

In the second place, I deny that any adhesions exist between the uterus and membranes, except at the commencement of gestation; or that such adhesions have been demonstrated by anatomists or physiologists. Dr. Inglis contends that *adhesion is the normal condition*, up to the "ripening of the ovum;" that the reason why the labors of primapara are generally tedious, is because the child is not usually carried to full term, and that labor commences *before the time arrives for natural separation to occur.* This doctrine is not sustained by anatomy nor physiology. In order to form an intelligent opinion on this subject, let us now inquire, how, and when are the membranes formed, and what are their natural attachments? Physiology teaches us that the human ovum, (like all other ova,) has a membranous investment, a sac within a sac, a germinal point or vesicle, albumen, yelk-ball, etc., microscopic in dimensions; that this ovum, when impregnated, if it does not escape into the cavity of the abdomen, or stop in the Fallopian tube, is received in the cavity of the uterus, which has already prepared a nidus, (called the decidua,) for its reception; that this ovum in passing out of the Fallopian tube reflects a part of the decidua from the uterine walls, and thus becomes somewhat fixed in position; that the ovum is here sustained, and grows by absorption of nutritive material from the decidua and maternal fluids; that the chorion, or external coat of the ovum, soon becomes invested with a shaggy or villous coat, which is also supposed to increase its endosmotic power; that the ovum thus continues to increase, and the uterus to expand, until the fœtal circulation is established. When the arteries of the funis pierce the chorion, and with the aid of its villi form the placental tufts, the maternal blood furnishes directly the material for the growth of the child. The fœtal heart now sends out the blood, which forms the placenta, which pours out the amniotic fluid, and which expands and enlarges the chorion and amnion. When the fœtal circulation is fairly established, when the maternal blood is received freely through the placenta, the decidual membranes and the villi of the chorion, having played their part in the uterine economy, disappear by absorption and the pressure of the expanding ovum. *This moment ends all direct adhesions between the uterus and membranes, except by the placenta,* for "the only part of the child which touches the mother, is the blood of the child." The chorion and amnion now fill the entire uterine cavity, except that part covered by the placenta, and the unexpanded cervix. They float loosely in that cavity, and do not touch the entire cervix, until near the close of gestation. How then can they adhere? As the uterus itself grows by the expansion of these membranes from within; is it probable that nature will interpose a serious obstacle to that expansion, by suffering adhesions to occur? The chorion and amnion, as before observed, are evidently but a part of the original ovum. The chorion is a serous membrane; the uterus is lined by a mucous membrane. Healthy mucous and serous membranes do not unite when brought in contact, but serous membranes unite readily. Hence, when the impregnated ovum is lost in the cavity of the abdomen, we may have union between the chorion and peritoneum; but when the ovum stops in the Fallopian tube, and expands there, we find no adhesions, because this tube is lined by a mucous membrane, continued from the uterus. Ovarian cysts, (which are probably only diseased and enlarged ova,) are covered by serous membrane, and frequently unite to the peritoneum, *as ovariotomists will most certainly testify.* When the uterus contains two, three, or more children, each enveloped in its separate bag of membranes, do we find these sacs all adherent to each other? We do not. Yet these sacs, being homogeneous, would be much more liable to unite, than would the mucous membrane of the uterus and the serous membrane of the chorion. This doctrine, that adhesion is the *normal condition* between the uterus and membranes, until "the ovum is ripe," is not anatomically correct, is not in accordance with physiological law, has no pathological facts upon which to base its truth, and is only supported by the pretended discovery *of a few observers, who have a theory to sustain.* I shall be prepared to believe it, *when I find nature uniformly violating her own laws.* In an extensive obstetrical practice of thirty-four years, I have never met with such adhesions, except in placental presentations, nor do I believe they can be proven to exist.

My friend, Dr. Reamy, endorses this theory and this practice. He also tells us that manual dilatation in a case of rigid os is very near akin to malpractice. Dr. Inglis informs us, however, that when manual dilatation is successful, he believes it is "chiefly owing to unintentional separation of the membranes," by the fingers, etc., thus showing how his judgment is biased by a false theory.

In conclusion, allow me to say, that the obstetrical practitioner who does not know that the repeated introduction of foreign bodies into the womb, will induce that organ to throw off its contents, with all the phenomena of natural labor, *whether membranes are separated or not*, is not quite the person to originate theories for sensible men to adopt.

Hospital Reports.

Pennsylvania Hospital,
March 6th, 1867.

Surgical Clinic of J. M. Da Costa, M. D.

Reported by Dr. Napheys.

Intestinal Obstruction; Disease of the Intestine.

Dennis McC., æt. 38. He was admitted into the hospital, February 28th, with the history that he had suffered from dyspeptic symptoms, but not to a marked degree. In truth, after further examination, it was found that the amount of disturbance in the stomach had been very slight, but that he had had colicky pains throughout the winter, and that though he had commonly a daily passage, frequently that passage was hard and deficient in quantity. Nevertheless, his general health remained good, and he was able to do a good day's work. Before he was admitted into the hospital, he was seized with a great deal of pain in the abdomen, not referred to any particular region, with vomiting and prostration. He had a passage from the bowels, but small in quantity and very hard, on the morning of the day he was admitted. It was on account of the intense pain from which he was suffering in the abdomen, together with the insufficient passages from the bowel, that he sought admittance to the hospital.

On admission, he presented the symptoms of collapse, blue lips, cold extremities, and abdomen immensely distended. It was the last feature of the case which, more than anything else, attracted notice. There was tympanitic percussion resonance over the entire surface of the abdomen. Pain on pressure was marked, although not confined to any one portion of the surface, yet it seemed to be most distinct toward the epigastric region. He had been thoroughly frightened by his friends, who thought him in a dying condition, and was very much alarmed as to his own state. He was ordered an ounce of whisky, and an enema of oil of turpentine, which was followed by a discharge of a large amount of flatus, together with what appeared to be fæcal matter, but only a small amount came away from the injection. Then two ounces of castor-oil were given, and cloths wrung out in turpentine were applied over the abdomen. By these means he was much relieved, still very little came away except flatus. The urinary secretion was normal in quantity and quality.

On the first of this month his face was anxious, there was considerable swelling of the abdomen, with tenderness persisting; considerable and distinct swelling and hardness, with considerable tenderness in the region of the transverse colon and in the course of the ascending colon were noticed as the tympany was reduced. He remained very much in this condition from the first to the fourth, when the vomiting present during the first three days, being readily excited by a little water, but not strictly spontaneous, had almost disappeared.

The treatment consisted in the steady application to the abdomen of cloths soaked in warm water and some laudanum, and covered with oiled silk, and in large doses of castor-oil, one to two ounces daily, with large enemata containing turpentine, forced up by a rectal tube, which came away in about an hour, diminishing the flatus, and containing granules and flakes of fæcal matter. Up to yesterday, the case may then be summed up as one of violent pain and distension of the bowels, some tenderness on pressure, immense flatus, which is partially relieved by injections, dulness on percussion in the course of the transverse and ascending colon, treated steadily and perseveringly by stimulating purgatives, without, as yet, there being any large discharge from the bowel.

Yesterday the note was made of intense thirst and occasional vomiting after drinking; tongue clean and moist, passes water more freely than on admission, though not in excessive quantity; expression still somewhat anxious; had two small passages since yesterday, without enema immediately preceding them; abdomen presents less dulness on percussion and less resistance. Yesterday afternoon, the note of this morning states, he had a large evacuation of mushy consistence, probably containing a quantity of fæcal matter, and during last night, following an enema, he had another copious discharge, more fluid in character, owing of course to the water from the enema.

The treatment has been kept up in the same way, chiefly by castor-oil and fomentations. When he was first admitted, one or two grains of opium were administered to ease the great pain from which he was suffering.

To-day the man's abdomen is still considerably distended. On looking closely, this abdominal distension is observed to be of irregular character, the lower and upper portions are most bulging, whereas there seems to be a comparative depression in the centre, toward the umbilicus. When he breathes, the movements of breathing are more perceptible in the crease at the umbilicus than either above or below. There is a sound of fluid in the bowel near the ileo-cæcal valve and

along the ascending and descending colon. The belly is, on the whole, tympanitic. There is some percussion dulness still perceptible, particularly over the ascending colon. The transverse colon is comparatively resonant, excepting at the point where the transverse and ascending colon join, where you obtain also the peculiar squashy sound of fluid. There is still some soreness and resistance to the touch, even in the small bowel, and particularly toward the right side, where he has always located his trouble more. Tongue disposed to be dry, slightly coated at the back. Pulse 96. Good percussion resonance of the chest. Heart sounds normal.

What has been and what still is the matter with this man? The vomiting would call attention to gastric disturbance, but there is an absence of anything which points out the stomach as being the seat of the trouble. The vomiting is sympathetic. He has been laboring under intestinal obstruction. He has had his ascending and transverse colon, possibly even the smaller intestine near the ileo-cæcal valve, filled with fæcal matter. It has been a gradual case of obstruction in a man for a long time constipated. He had for a long time a passage every day, but with slight, colicky pains, clearly the result of abdominal distension, and finally the bowel became partially impacted. The mass which accumulated could not be voided, and by its pressure gave rise to faintness; if it had pressed upon the sympathetic ganglions, it is readily perceptible how collapse could be produced.

As a matter of clinical moment it is interesting to note that the man has never had an entire absence of fecal discharge. Even after he was admitted into the hospital what little came away contained a small amount of fecal matter. And, moreover, he had a passage, although a small one on the day before he came in. It must not therefore be supposed impossible that a man has intestinal obstruction, because he has a certain amount of fecal discharge, particularly if this be obtained by washing out the rectum with enemata.

This case also shows the necessity of perseverance in the treatment, before results can be accomplished. The real success of the treatment only came yesterday. The man has taken nearly a pint of castor oil, large warm water and turpentine enemata have been steadily thrown up with the rectal tube; yet, although there has always been a very slight fecal discharge, the remaining dulness showed it had not been complete, until yesterday, when a quart of fecal matter passed. There is yet probably a partial accumulation in the ascending colon, and in a modified manner the treatment will still be kept up.

The purgative which has been employed in this case, castor oil, is by far the best where there is intestinal obstruction of any form, particularly if it be dependent upon hardened fecal matter. It is better than the more active purges. During the first few days a little opium was added. This was because of the amount of the pain and tenderness, and the fear that the greatly distended bowel might lead to peritoneal inflammation. In truth, the junction of opium in moderate doses with castor oil, forms a valuable part of the treatment in cases of intestinal obstruction, the astringent effect of the opium not being sufficient to counteract the purgative influence of the oil, which acts partly mechanically by lubricating the wall and helping along the matter which has accumulated.

But perhaps the best treatment of any form of intestinal obstruction is by the persevering use of enemata. The physician must not however introduce a little syringe into the bowel, inject a pint, and rest satisfied that he has done all that can be done. A stomach tube, or one of similar character, should be passed up the bowel until only enough is left to insert the syringe in, and then the fluid should be pumped in by the quart, as much as the bowel will hold.

The intestinal obstruction in this case must have been by fecal matter. There were none of the signs of invagination of the bowel. But after all, merely a symptom has been treated. The fecal accumulation is not the only thing the matter with this man. Investigations will be instituted, and the cause why the bowels were thus obstructed ascertained if possible. As a matter of likelihood, it is probable that the man has had chronic inflammation of the coats of the large intestine, a state of things which often exist in laboring men, sometimes also in women who pay no attention to the calls of nature. This gradually leads to distension of the bowel, is attended with a want of tone, furnishing the the favoring elements to intestinal obstruction. Or there may be even increased inflammation with an abscess surrounding the colon; a view which the cachectic look of the patient renders not unlikely.

Pathological Specimens. Purulent Cysts in the Heart.

This is a very curious specimen of diseased heart, an illustration of that very rare disease, or rather pathological state, described as purulent cysts in the heart. There is a cyst at the lower portion of the left ventricle, which when first taken out was filled with purulent fluid.

The heart was removed from a colored man, who died of malignant typhus, eight days after being admitted to the hospital. The post-mortem showed no mark of inflammation anywhere—merely a congested condition of the lungs and brain, a small amount of fluid in the pericardium and the yellow puriform fluid found in this cyst.

Cysts in the heart have given rise to more discussion than almost any other point in morbid anatomy. The appearance presented in this case, which undoubtedly looks like a cyst, is thought by some to be the result of phlebitis. Another view is, that it is the result of endocarditis, which it clearly is not, as this specimen shows, for there is not a particle of endocarditis at any portion of the heart. Then again, another view, to which Dr. Da Costa is inclined, is that the so called purulent cysts of the heart are nothing but fibrinous concretions, which from some cause have become adherent, and then a cyst-wall having formed around them, the fibrin has broken down into a puruloid fluid, for no microscopist has succeeded in finding true pus. The walls in

this case are simply the cyst around what has been a fibrinous concretion; they are adherent to the trabeculæ, but not to the columnæ carnæ, proper.

So far as the cases have been observed this state of things gives rise to no symptoms or signs by which it could be recognized during life. It may be readily seen how a case of any disease may die by the softened matter from such a cyst becoming mixed with the blood, and still further vitiating it, and probably death resulted in part in this case from that cause.

Editorial Department.

Reviews and Book Notices.

NOTES ON BOOKS.

Not far from a quarter of a million emigrants land at New York annually. Their sick are cared for by the Commissioners of Emigration in the state hospital on Ward's island. Last year, including the infirm and helpless, more than ten thousand were there treated. Over one sixth of the cases in the medical wards were typhoid fever, and 291 were cholera. In spite of the unfavorable condition in which they often came from shipboard, the results were highly satisfactory, which must in part be attributed to the excellent hospital accommodations provided, and largely to the skill and devotion of the medical staff. The "Annual Report of the Commissioners of Emigration." (N. Y. 1867, p. 112,) contains these and many other interesting facts. The report of Dr. Geo. Ford, Chief Physician, Dr. J. M. Carnochan, Surgeon in Chief, and especially that of Dr. John Dwyer, Secretary to the Board, will claim the attention of medical statisticians.

The "Humboldt Medical Archives," is the name of a monthly medical journal proposed to see the light in St. Louis, Mo. under the editorial auspices of Drs. A. Hammer, and M. A. Pallen.

Perhaps most readers of the Reporter are aware that there is in London a medical publishing club known as the New Sydenham Society, but probably few are acquainted with the great merit and cheapness of its publications. Its prime object is to translate valuable foreign, and to republish scarce and meritorious British medical works. It commenced in 1859, and to illustrate the excellent judgment used in its selections, we need but mention among its volumes already issued, Diday on Infantile Syphilis; Frerichs on Diseases of the Liver; Bright on Abdominal Tumors; Casper's Forensic Medicine; Gooch on Diseases of Women; Kramer on Diseases of the Ear; the admirable essays of Schroeder van der Kolk on the Brain and Spinal Cord; a number of magnificent plates of skin diseases from Hebra's Atlas, and every year a summary of bibliography, etc., in a year book of the Progress of Medicine and Surgery. It is proposed to publish this year, a Biennial Retrospect of Medicine and Surgery; Griesinger on Mental Diseases; and Hebra on Diseases of the Skin, with plates of life size. What recommends this series especially is that they are not only well selected, but handsomely printed and cheap. In England the four annual volumes can be had for one guinea. In this country, the price of gold, duty, etc., make it $10.00. The Atlas of Skin Diseases is alone worth this sum. Those wishing to subscribe can transmit this amount to Dr. Richard J. Dunglison, 1116 Girard Street, Philadelphia, Honorary Local Secretary, who will see that the books are forwarded them as soon as issued.

Transactions of the Medical Society of the State of New York, for the year 1866. Albany, 1866. 1 vol., 8vo., cloth, pp. 420.

The first impression that every reader will gain on opening this volume, is one of disgust at its villainous paper and careless presswork. The leaves are spotted and speckled to a degree that stamps it at once as a "contract job." There is some satisfaction in being able to say, that if the reader will conquer the temptation that at first arises, to send it back straightway to the paper-mill, he will find in it several valuable articles. Of those of general interest, Dr. J. E. Steel contributes one on Embalming, not adding much to what we have on that subject, however; Dr. Squibb makes an Appeal for the Materia Medica in his usual sterling style; Dr. L. McKay speaks of the gingival margin as a proof of the want of iron in the blood; Prof. Stephen Rogers inquires into the various causes leading to the formation of fibrinous bronchial casts; Dr. John P. Gray narrates some instructive cases of incomplete progressive paralysis; Dr. W. T. Thoms draws from life a dreadful picture of the New York tenement-houses; Dr. C. A. Lee furnishes some valuable suggestions on the treatment of the insane poor; Dr. G. J. Fisher concludes from the previous volume his learned and thorough essay on Compound Human Monsters; and there are a number of lesser articles, on surgery, etc. The illustrations are numerous, though several of them are rough and blurred in the printing.

It would seem to be more appropriate to a State Medical Society to devote greater space than is given in this volume to the climatic changes, the epidemics, and the general statistics *of the State*, to represent it more distinctly as a unit, and to complete its medical history and description. The articles in this volume are mostly excellent, and the chief fault is that they do not seem local enough.

Medical and Surgical Reporter.

PHILADELPHIA, AUGUST 17, 1867.

S. W. BUTLER, M. D., & D. G. BRINTON, M. D., *Editors.*

ILLICIT INTERCOURSE and ITS FRUITS.

Of all the knotty problems with which social science has to grapple, beyond doubt the very knottiest is the control of the sexual instinct. Moreover it is a growing evil, daily made more desperate by a civilization which inclines men to defer marriage more and more, and which is constantly offering greater facilities to conceal the consequences of illegal intercourse. New and eccentric forms of vice are thought out or imported from corrupt European capitals to stimulate worn out debauchery, and the pages of MARTIAL paint no more shocking depravity than the physician almost daily learns in New York or Philadelphia.

Any suggestion that tends to lessen in any way this monstrous evil will be gladly received by all, and by none more heartily than the medical profession. An esteemed correspondent and practical philanthropist has written us on this subject, proposing that cohabitation, *ipso facto*, be decreed *prima facie* evidence of marriage, believing that thus the disgrace of bastardy would be removed from many children born out of wedlock, and a degrading match be held *in terrorem* over those who indulged unlawful desires.

"The prevailing ideas," he says, "respecting this subject of illegitimacy, are, it appears to me, quite erroneous, and a disgrace to the vaunted intelligence, Christianity, and civilization of the age. For there should be, as there is in reality, but a very small number of children who could be included in the class of illegitimate, and these only from the association of married men with single women or other men's wives; and single men with married women. All others should be legitimatized by legal enactments, recognizing the fact that *cohabitation and marriage go together*, the fact of sexual union being sufficient evidence of marital consent on the part of those thus indulging. This act of sexual conjugation being voluntary on the part of both male and female, and the essential element for procreation—the ultimate design of marriage—should be as conclusive of the marital union of men and women by the laws of man as they are by those of God. For, as generation occurs from sexual intercourse by the operation of the laws of life without regard to human ordinances regulating the marital relation, it is in reality the only natural and true marriage physically considered, and humanly should be so acknowledged."

That various objections arise at once to this scheme is no doubt the case. True that it meets but a limited number of cases, true that it might lead to still greater frequency in criminal abortion, that it touches not at all the crime of adultery, that it makes marriage no longer "honorable," but a penalty, and that it is but an appeal to fear only. Nevertheless if to any degree it will check or hem the abuse of the genetic instinct, let us give it our closest attention.

But after all, for our part, looking at the stringency and yet the impotency of the laws against adultery in certain countries, and against sodomy in others, considering the deliberate madness, let us call it, with which people will set about gratifying their passions in the face and with the full knowledge of the most appalling physical and social dangers, we own to serious doubts whether the plan which our correspondent proposes, or whether the risks of conception and the perils of criminal abortion, or whether any physical or legal terrors, no matter how terrific of aspect, will materially or at all diminish the evil. Its root lies deeper. Not by prohibition, not by fear, not by deprivation, but by instruction, by instilling self-respect and self-control, by sedulously cultivating the better elements of human nature, by aiming at a form of civilization less self-seeking than ours; in other words by a more intelligent adoption of the gospel of love (antiquated suggestion!) than now prevails, will alone strike at the foundation of the matter.

ON THE REGISTRATION OF VITAL STATISTICS.

Though the value of statistics is becoming more and more appreciated by governments, our legislators are still a long way off from conceding them their just importance. To introduce in this country a complete system of registering births, marriages, and deaths, we must clearly show where the compensation is that meets the outlay in establishing it. Nor will any remote advantages, such as philosophers, as QUETELET, or historians like BUCKLE, draw from it, satisfy "the members from the country." They must see just what and where it will effect their own interest and that of their constituents, or else they will never vote a penny for a Bureau of Statistics.

These immediate advantages are of two kinds; they touch on *life* and on *property*. The latter is the more tangible. The validity of marriages, the ascertaining of parentage, the proof of death, these are all essential to the peaceful tenure and

transmission of property. No means are cheaper and better than compulsory registration to attain them. As for the physical health of the masses, all physicians know that it is only by a study of authentic records on a large scale, that we can arrive at a knowledge of the hygienic consequences of national habits, traits and customs; a knowledge indispensable to proper hygienic legislation, and to the acquisition of the highest physical and mental power in a community.

These points would bear expanding, and it is to be regretted, that in his otherwise very excellent "Essay on Medical and Vital Statistics," (to which the New York Medical Society assigned the Brinsmade prize last February,) Dr. F. B. Hough has not devoted more space to this branch of his topic. While fully impressed with the value of such records himself, he takes for granted too much that others feel in like manner.

The essay includes a form of a bill recommended. It provides for a Department of Statistics, presided over by a Superintendent appointed by the Governor. The immediate registrars, where not already existing, will be the town clerks. It is their duty to receive from heads of families, physicians, midwives, clergymen, or magistrates, such report of births, deaths, and marriages, as they have professionally superintended, and to return them annually to the department chief. A fee of twenty-five or fifty cents for each entry will repay the registrar, and a fine of ten or twenty-five dollars will punish the physician, etc., who fails to report. One half of this fine reverting to the registrars, is an additional stimulus to their performance of their duty; and they themselves will be subject to a like penalty for neglect to enter properly the reports handed them. Searches, certificates, etc., will, it is argued, go far to support the department. Further provisions are made for the prompt report of the superintendent to the legislature each year, etc.

The bill is carefully prepared, and looks practicable in its main features. Still there would be much difficulty in carrying it into effect in thinly settled districts, and when parties desire to evade it. The penalty of $25.00 is a bagatelle, when balanced with the reasons often existing to defer the publication of a birth or a marriage. The right course is, as in the Code Napoleon, to make the registration of a birth essential to legitimacy, to do away with the independent validity of marriage by the clergy, and to refuse to pass a will to probate until the registrar's certificate of death is shown. Until these steps are taken, we despair of seeing any system of registration carried out sufficiently accurately to furnish material for safe generalization.

Another part of Dr. Hough's essay gives plans for keeping records of private and hospital practice. The form recommended for the first of these is as follows, the headings being printed on a foolscap octavo page in a book for the purpose:

1. Name. 2. Age—, Civil condition. 3. Occupation,—Place of birth. 4. Disease or Injury. 5. Date of first visit. 6. Previous duration of illness. 7. Treatment. 8. Date of last visit. 9. Result. 10. Remarks.

He particularly insists that the record and the *classification* should not go together, but the latter be reserved for some leisure day. Those who would learn the further particulars of his method, can doubtless obtain copies of his essay, by addressing the author at Lowville, N. Y.

Notes and Comments.

Cranial Capacities of Man and Monkeys.

Dr. L. Th. Bischoff, of the University of Munich, has lately edited a series of lithographic plates, comparing the skulls of the gorilla, chimpanzee, and orang-outang. From a measurement of thirty-five crania, the following maximum internal capacities were derived: gorilla, 28.37 cubic inches; chimpanzee, 28.07 cubic inches; orang-outang, 35.09 cubic inches. The last is said to be the largest monkey skull ever brought to Europe. Yet the wide chasm between this and man is at once seen on comparing it with even the very smallest skull in Dr. Morton's splendid collection in this city. The latter, of a native African, has a capacity of 65 inches. Though we confess that the largest skull in the collection,—that of a "Dutch gentleman,"—is further from the African than the African from the gorilla, as it measures 114 inches in cubical capacity. Dr. Bischoff thinks that the race of chimpanzees threatens to become extinct, and *en passant* takes the opportunity to show that Darwin's theory of the evolution of species is as yet far from proven.

Imposition.

A man in New Jersey is imposing villanous compounds upon the public as medicinal wines, under the name of "Elderberry," or "Sambuci" "Port."

The manufacturer has the assurance to say that his so-called wines have been adopted for

medicinal purposes in the hospitals of this city, New York, and Washington. It is scarcely necessary to say that this is not the case, it being merely an advertising dodge to impose worthless compounds upon the public, which, under the name of "medicinal wines," are doing much harm in the community. We are very sorry to see that our religious papers are lending their columns to advertising these deleterious compounds. They might just as well—better, indeed—advertise for tavern-keepers and drinking saloons.

Increase of Insanity.

Insanity, as a disease, seems to be alarmingly on the increase in the more civilized portions of the world. Last year the London *Medical Times and Gazette* reported that the number of the insane in England had increased twenty-one per cent. in five years, while the population had only increased five per cent. In France the case was still worse. The number of the insane increased forty per cent. in five years, while the population only increased two per cent.

The *Pall Mall Gazette*, in discussing this subject recently, estimates that in England mental diseases have gained on the population to the extent of at least three per cent. per annum since 1859. The present ratio of the insane to the population it puts at one to every four hundred and ten. In the whole of Great Britain there is the greatest amount of insanity in England and the least in Ireland, probably because in the former there is the greatest mental activity and the most high living.

Such facts lead one almost to query whether in a perfect state of civilization insanity will not be the normal condition of mankind! Certainly it would appear to be the normal condition of diseased humanity; that is, that mental are taking the place of physical ailments as civilization progresses.

A New Styptic.

The *Antwerp Journal* says that the perchloride of iron combined with collodion is a good hæmostatic in the case of wounds, the bite of leeches, etc. To prepare it, one part of crystallized perchloride of iron is mixed with six parts of collodion. The perchloride of iron should be added gradually, and with care, otherwise such a quantity of heat will be generated as to cause the collodion to boil. The composition when well made is of a yellowish-red color, perfectly limpid, and produces on the skin a yellow pellicle, which retains great elasticity.

Correspondence.

FOREIGN.

Letter from France.

Olive Oil in Rheumatic Gout.

Paris, France, July 30th, 1867.

Editors Med. and Surg. Reporter:

I came on from London to Paris, July 17th, and now offer, for your excellent journal, so much as I think of general interest to your readers, that may be new, interesting, and profitable. There is one observation I made in London, however, after I wrote you, that I think worth noticing. It is the internal administration of olive oil in rheumatic gout. Dr. Ramskill, Physician to the London Hospital, made the discovery accidentally, as he informed me, in this way. Having a very bad case, he desired to give him cod-liver oil; but as the patient could not take it, he substituted olive oil, in tablespoonful doses, three times a day, and was astonished at the effect of the remedy. Dr. Ramskill is one of the most reputable physicians in London, being Physician to the National Hospital for Paralytics and Epileptics, as well as to the London Hospital, one of the largest and very best in London. He is a *gentleman*, as well as an enterprising physician. In fact I am inclined to place his *success* in the treatment of disease second to none in London, from all I could discover.

Pneumatic Pressure, etc., in Surgery.

In *Hotel Dieu Paris*, in the Wards of M. le Dr. Maisonneuve, who stands second to few, if any, in Paris, there has very recently been introduced by him, an application for the stump of amputated limbs, consisting of a *gutta percha cap*, in the shape of a long bell, and of a size to fit the stump. To the apex of this bell-shaped cap is attached an *India rubber tube*, about two feet long; the other end passing into a glass jar, holding perhaps near a gallon, through one side of its cork. Through the other side of the cork or stopper of the bottle, passes another *India rubber tube*, of the same size, and of about the same length, to the other end of which is a fixture for the attachment of an air-pump. Now this last tube is furnished with a stop-cock, in about its middle, which completes the apparatus.

Now the apparatus, thus constituted, is designed not only to keep the flaps of the amputated stump together, after applying a few strips of adhesive plaster, without sutures, but it also excludes the air, as well as draws out all the

fluids that ooze from the stump, thus preventing suppuration; or should it take place, were it possible, re-absorption of the matter, and prevention of the sympathetic fever it might produce. For on applying the cap to a stump, after amputation, of a size to suit it, the air-pump is attached to the second tube, the first being attached to the point or apex of the cap, at one end, while the other passes through the cork into the bottle, as before described. Now by exhausting the air in the jar, or bottle, with the air-pump, it is also withdrawn without difficulty from the gutta percha cap, as it fits snugly to the stump, passing up it eight or ten inches, and completely enveloping it; the external pressure of the atmosphere upon the cap, causing it to hug so closely to the stump as to entirely exclude the air. At the same time, every particle of the fluid exuding from the stump is drawn through the first tube into the jar. And as the stop-cock is in the second tube, to which the air-pump is attached, the exuding fluids are instantly passed into the bottle, and of course away from the incised surface.

The apparatus as first used in the Hotel Dieu was simply the cap, with one tube, without the jar, and of course did not keep the fluids drawn off, though it exhausted the air. This was introduced by M. Le Dr. Guerin, of the same hospital, I believe; but the jar, and second tube were added by M. Maisonneuve, in order to draw off the fluids as they exude. The effect of the apparatus is to secure an even approximation of the flaps without sutures, to exclude atmospheric air, and thereby avoid suppuration; and at the same time to remove all the exuded fluids, preventing of course their re-absorption, either decomposed or in their primary state, thereby preventing sympathetic fever and its consequences.

Now, as I am more of a physician than surgeon, I do not feel competent to comment on the utility of this apparatus for pneumatic pressure. The result of its application in the Hotel Dieu, however, I may say, so far as I have seen, is highly satisfactory. The pump is usually worked a little every day, in order to be sure that all the air and fluids may be withdrawn from the stump. I may also say, that there are two points apparently very well established, by experiments here; the first being, that it is the *living organisms* in the air, falling upon incised and lacerated surfaces, that cause suppuration and decomposition of exuded fluids; and the other is, that it is the *re-absorbed matter*, generally decomposed, that produces the sympathetic fever that too often follows amputations and lacerated wounds. This apparatus, as well as the carbolic acid treatment in Scotland, and now being introduced into England, of which I recently wrote you, may very generally prevent all this, by excluding these organic particles constantly floating in the air from the lacerated or incised part, the *acid* probably also destroying the ill effect of such particles as may have fallen upon the injured surface, before any application is made.

Disease and its Treatment in Paris.

From all that I can discover, after a close observation in the different hospitals of Paris, I incline to the opinion that disease, in all its forms, approximates more nearly to disease as it occurs in America, than do the diseases of Scotland or England. This may be owing to a greater similarity of *climate*, and perhaps *habits*. And the greater similarity of disease may account for the really greater similarity of treatment. In fact I have been astonished to see so little difference in the type, as well as variety of diseases; and such a correspondence in the mode of treatment just now, being, as appears to me, more active and less expectant, than in England or Scotland, and perhaps necessarily so. In the treatment of surgical cases, I think, perhaps, the French surgeons are just now a little more conservative than the American or English; hesitating in relation to ovariotomy, and by no means invariably administering chloroform, as they so very generally do in England, Scotland, and America.

I may add, in conclusion, that by far the best arranged and ventilated hospital I have seen, is *Lariboisiere*, in Paris; and the principal physicians and surgeons, with whose treatment I have become most familiar here, are Messrs. Velpeau, Marison, Fauravier, Hererd, Gubler, etc.; M. Velpeau, though nearly 80, retaining great vivacity, as well as steadiness of hand and dexterity in operating.

E. R. Maxson, M. D.

DOMESTIC.

Treatment of Tinea Sycosis.

Editors Medical and Surgical Reporter:

As one of the correspondents of the Reporter desires to know the treatment for tinea sycosis, mentagra, or barber's itch, it may not be amiss for me to give the treatment which has been most successful with me.

It has happened that in the last eighteen months, three well-marked cases of the above disease came under my charge. I treated them

all alike, and satisfactorily to the *patients* and myself. The first case had been under treatment for three weeks before I saw it, the disease having spread over the whole face and head. The second and third cases I saw before it had made so much progress. My treatment has been substantially as follows: I cut the hair of the head and face as short as I can with shears,—open the bowels with a saline cathartic, and forbid all stimulating diet.

I give ten drops of Fowler's solution of arsenic three times a day; increasing the dose, according to the extent of the disease and its effects on the system, to fifteen drops. I direct the parts to be thoroughly cleansed with castile soap and soft water, morning and evening, and the following ointment applied night and day, as often as it is necessary to keep the skin perfectly soft.

℞. Ung. sulphuris,
" picis liquidæ,
" hydrarg. oxidi rubri, āā ℥ij. M.

The average time of treatment in the cases referred to, was three weeks.

S. T. Davis, M. D.

Millersville, Pa., Aug. 7th, 1867.

The New Medical Law of Maryland.

Editors Med. and Surg. Reporter:

The new medical law of Maryland appears to attract considerable attention outside the State. In your valuable journal of June 8th, you give a synopsis of its provisions, and in your issue of July 20th, Dr. Kennedy, of Delaware, contributes a letter of much interest, discussing the merits and tendencies of the law.

You state that you have long ago settled down to the opinion that our profession must be a law to itself, and not seek the interference of State legislation; that it should have its own organizations revolving around the American Medical Association as its centre.

I wish to state, first of all, that I do not object to the American Medical Association, and that the late law of this State does not interfere in the least with its operations or supplant it in any manner whatever, but on the contrary, facilitates its operations, inasmuch as it compels county organizations.

Let me ask the question—What has the profession accomplished by its regulations and codes, in the great and *primary* object of protecting the health and lives of the community from the practices of the hosts of pretenders who infest all parts of the country? *That is the point.* How is it in Pennsylvania? Would not every sensible physician in your State, especially in the rural districts, hail the passage of a law which would prevent all persons from practising medicine, surgery, or obstetrics, without a license from a competent board, as "a consummation devoutly to be wished for"? I say especially in the rural districts, as I am convinced that the physicians of Philadelphia and the larger cities, on account of their great influence, consequent to more perfect organization, do not appreciate the great necessity for such a law as much as their less fortunate brethren in the country. And here let me say a word to these unfortunates. You have but one resource left, in the absence of law, and that is, organize your county societies everywhere, enforce your code and regulations, and draw the line as broadly as possible between the true physician and the false.

I do not think that your objection to our law, because it permits all classes of doctors to practice, can be sustained, for this, in my opinion, is its chief excellence, inasmuch as it makes it *practicable.* No other law could be sustained. The law wisely places the privilege to practice upon the broad ground of "a knowledge of the principles of medicine."

When I compare our condition, under the operation of this law, with that of the physicians of Pennsylvania, which I am the better enabled to do, as I have practised many years in that State, I feel that we are lifted out of the mire.

Our law makes it necessary that all persons practising medicine, surgery, and obstetrics, sha'l pass an examination before a competent board; the absence of all law in your State permits every impostor, too lazy to work, to practice upon the lives of the ever-credulous people. Which community is better protected?

George B. Fundenburg, M. D.

Cumberland, Md.

News and Miscellany.

Prof. Agassiz on the Origin of Man.

Prof. Agassiz having been quoted as favoring the dogma, that the negro belongs to a lower scale of beings than the white race, writes that he has always maintained the opinion, and still holds it, "that the different types of the human family have an independent origin, one from the other, and are not descended from common ancestors; but this idea, I do not apply to the Negroes only, but to the Indians, the Chinese, the Hindoos, the Australians, etc., as well. In fact, I believe that men were created in nations, not in individuals; but not in nations in the present sense of the word; on the contrary, in such crowds as exhibited slight, if any, diversity among themselves, except those of sex."

American Dental Association.

This body opened its seventh annual session in Cincinnati on Tuesday, July 30th. The following were nominated as officers:

For President—H. J. McKellops, of St. Louis, and A. Lawrence, of Lowell, Mass.

For 1st Vice-President—P. G. C. Hunt, of Indianapolis, Ind.; Geo. T. Barker, of Phila.

For 2d Vice-President—A. S. Talbert, A. B. Robbins.

For Corresponding Secretary—C. R. Butler, W. T. Arrington.

For Recording Secretary—J. Taft, J. A. Kinnecott.

For Treasurer—W. H. Goddard, James Taylor.

An election was then held, by ballot, which resulted in the choice of the following:

President—A. Lawrence.
First Vice President—P. G. C. Hunt,
Second Vice-President—A. S. Talbert.
Corresponding Secretary—C. R. Butler.
Recording Secretary—J. Taft.
Treasurer—W. H. Goddard.

The remainder of the proceedings on Tuesday were mainly preliminary. On Wednesday a report was adopted repudiating the St. Louis Dental College as and irregular an untrustworthy institution. The annual dues of membership in the Association were increased from $2 to $5. A discussion was then held on Dental Pathology and Surgery, which was continued through the evening session. On Thursday, Dr. Allen, of New York, formerly of Cincinnati, read an interesting paper, in which he argued that the reason Americans generally had poor teeth arose from a deficiency of lime in the body, and that this deficiency was caused by bolting grain, thus removing the outer parts of the grain which contain the most lime. Niagara Falls was selected as the next meeting place. On Friday the Standing Committees for the ensuing year were elected.

On Friday evening the Association and invited guests were entertained by a banquet at Hopkins' Hall. On Saturday morning the Association held a brief session, and then adjourned until next year.

An Ingenious Bullet Detector.

A very ingenious piece of mechanism for the detection and extraction of bullets in wounds has been devised by Mr. Sylvan De Wilde. The probe, consisting of two steel wires insulated from each other, is connected with an electric horseshoe magnet and a bell, and when (introduced into the wound) it touches the bullet the circle is completed and the bell rings. The forceps act on the same principle, and are intended first to detect, then to seize, the bullet. They have curved points, and not pallets or spoons. The points of the probe are kept sheathed on introduction to a wound, and not uncovered until the supposed bullet is felt. This is effected by means of a sliding tube. Mr. De Wilde's probe is a sensitive artificial finger, which enters deeply into the tissues, and gives the signal at once when it detects the hidden source of mischief below.—*London Lancet.*

Effects of Coffee and Wine.

A correspondent of the New York *Evening Post*, one of our best exchanges—says that at a recent session of the Academy of Sciences, held in Paris, a curious paper upon the moral influence of different kinds of food was read by a writer who had experimented upon himself with coffee and wine. He first fasted forty hours in order that his stomach might be empty, and then ate nothing but coffee and bread, or wine and bread, for several days, and noted his mental sensations.

"If I swallowed a certain quantity of strong coffee slowly, I felt a singular change take place in my nature. I seemed almost instantaneously transformed into another man; all feeling extinguished itself in my breast, at the same moment my intellect developed an unaccustomed activity; it seemed as if all my faculties had transformed themselves into intelligence. I ceased to be communicative and kindly; I became cold, cross, and selfish; in a word, my whole character assumed an aspect exactly the reverse of what it had hitherto been. My intellect labored without the slightest fatigue, and almost in spite of myself; upon any given subject it penetrated profoundly and drew almost infinite consequences. If I wrote, my style was correct, but cold. If I remained a long time in this condition, my intellect ceased its activity of production, but like my body, it remained constantly agitated. I could not sleep, or at least, could never completely lose my consciousness. In a word I was entirely reduced to motion and intelligence. It is worthy of note that my pulse was both slow and feeble throughout the experiment. If now I drank some wine, everything changed; calm returned, followed by generous sentiments. I felt myself become again kindly and sympathetic. I ceased, as if by magic, to be cross and egotistical. If the experiment was made from the beginning with wine and bread, instead of coffee and bread, these phenomena were exaggerated; the mind was dull to such a point as to be embarrassed by the slightest effort; the character became extraordinarily sensitive. I dreaded to offend any one by the slightest thing; whereas, under the influence of the coffee, the feelings or opinions of the world were completely indifferent to me. In the meantime this vinous sensibility is not necessarily benevolent. If the person happens to fall under the influence of malevolent feeling, that is equally intensified. Finally, I became heavy, sleepy, inclined for repose; the intellect ceased to act; sensibility alone remained."

The author of the memoir observes in conclusion, that coffee and wine may be taken as the types of two great classes of food, of which one acts on the intellect and nerves of motion, the other on the sensibility and nerves of sensation; that a majority of articles used as food occupy a middle place between to extremes.

Epidemic Trichinosis.

Trichinosis, from the consumption of pork infected by trichina, which was thought to be finally extinguished in Germany, has shown itself anew at Helberstadt. A considerable number of

the inhabitants, amongst whom were children three years old, have been infected. The butcher who sold the pork was only saved from the irritated populace by the intervention of the police.—*Brit. Med. Journal.*

Ether *versus* Chloroform.

Lyons is the only city in France, and Boston in the United States of America, where chloroform is laid aside and ether preferred as an anæsthetic. A death having taken place this summer at Lyons, in a woman of delicate constitution, under anæsthesia, while an orthopædic apparatus was being adjusted to her foot to correct some deformity, the fact gave occasion to a discussion at the Academy of Medicine in that city. It then appeared that, since the resolution had been come to, under a certain predominance of opinion, to adhere to the use of ether, no less than seven deaths had occured under anæsthesia at Lyons; whereas, in Paris, during the fourteen years that chloroform has been in use, over a much wider range of cases, the same figure expresses the total number of casualties, for they have been no more than seven.—*Brit. Med. Journal.*

—— Among the causes of death given in the June report of the Lowell, Mass., city physician, was "Homœopathic foolery."

—— The Social Evil.—The last Legislature of Ohio passed a bill, authorizing Boards of Health in the large cities to enumerate and record the female inmates of disreputable houses, and to remove and protect those under eighteen years of age. The Cincinnati Board of Health have directed such enumeration to be made.

—— The Dental Art and Practitioners.—Forty years ago surgeons and doctors generally officiated as teeth-pullers whenever occasion demanded. In 1820 there were but thirty practicing dentists in the United States. In 1850 the number had increased to 2,923, and at present there are about 5,000 regular dentists.

—— Nitrate of Silver Stains may be removed from the hands or clothing by the combination of tincture of iodine and a solution of hyposulphite of soda.

—— Returns of the Registrar General of England show that in that country, in 1866, there were 187,519 marriages, 753,188 births, and 500,938 deaths.

[Notices inserted in this column gratis, and are solicited from all parts of the country; Obituary Notices and Resolutions of Societies at ten cents per line, ten words to the line.]

MARRIED.

Barker—Starr.—Aug. 5th, by the Rev. Robert M. Mitcherson, Jesse Barker, M. D., of this city, and Mary Rose Starr, of Baltimore, Md.

Jacobs—Potts.—At Norristown, Pa., Aug. 5, 1867, at the residence of the bride's father, by the Rev. J. F. Halsey, D. D., Dr. Theodore Jacobs, of Rock Island, Ill., and Mary Grace, only daughter of John Potts, of Norristown.

McIntosh—McMillan.—At Knoxville, Tenn., on the 12th ult., at the residence of the bride, by Rev. Mr. Bachman, J. C. McIntosh, M. D., and Mrs. Margaret McMillan, all of that vicinity.

Wolff—Besore.—At the residence of the bride's father, May 29, 1867, by Rev. W. A. Harris, Dr. M. L. Wolff, of Pa., and Miss Elva Jane Besore, of Clear Spring, Md.

DIED.

Morgan.—In New York, Aug. 4, after a short illness, Charles Edward Morgan, M. D., eldest son of George and Paulina A. Morgan.

Shields.—Of yellow fever, in New Orleans, on the 10th inst., Dr. Geo. W. Shields, Assistant Surgeon, U. S. A., formerly of this city.

OBITUARY.

Daniel Dwight Hitchcock.

Dr. D. D. Hitchcock died of cholera on the 17th of July, at Fort Gibson, Cherokee Nation, in the 45th year of his age.

In Dr. Hitchcock we have lost a friend of our youth, one whom we respected and loved. But our loss is not to be compared to that of a dependent family, and to the people among whom he had cast his lot.

Dr. Hitchcock enjoyed the advantages of a superior education, both classical and professional. He was a student of Dr. E. R. Peaslee, and a graduate, we believe, of the Medical School of Maine. His father having been a missionary of the American Board among the Cherokee Indians, and finding that an educated physician was needed, he settled among them and practised his profession intelligently and earnestly for about sixteen years.

The trying years of the rebellion bore hard on the Cherokee people, and Dr. Hitchcock lost all his property and became broken down in health. He was just recovering from these disrsters, and had received the appointment of Pension Agent for the Cherokee Nation, when, on the 29th of June, cholera broke out at Fort Gibson, and from that date to the 16th of July, he labored incessantly, day and night, among the sick and dying, when he was attacked suddenly, and died, after an illness of less than twenty hours.

ANSWERS TO CORRESPONDENTS.

Dr. W. W.—Stille's Therapeutics is just now reprinting. As soon as out we will send you a copy.

Dr. J. A. R.—Cataract needle sent August 12, with letter.

Dr. R. E. S.—"Why not," sent Aug. 12.

Dr. R. N. P.—"Why not," mailed to you Aug. 7.

Dr. J. E. C.—Hartshorne's Essentials, mailed Aug. 12.

Dr. J. W. S.—Hartshorne's Essentials, sent by mail, Aug. 7.

Dr. D. H. McC.—Pocket Record and Lehman's Phys. Chem., sent by mail August 7.

Dr. A. H. H.—Flint's Practice went by mail Aug. 7.

Dr. E. T. M.—Our "Revised Catalogue of Medical Books and Surgical Instruments," will appear about Oct. 1st. As soon as out we will send you a copy.

Dr. W. K. C.—Hammond's "Physiological Essays," sent on the 7th.

Dr. F. H. B.—We sent you the case of eye instruments on the 9th. The delay was on the part of the surgical instrument maker.

Dr. A. J. K., of New Jersey.—We have written you three times about your adv't. Why don't you answer?

Dr. H. H. H.—The list of Practices for sale will not be ready for a few weeks. As soon as out a copy will be sent you.

METEOROLOGY.

July,	29,	30,	31.	1,	2,	3,	4.
Wind.....	S. W.	N.	N. E.	E.	N W.	E.	S. W.
Weather.....	Cl'dy. Rain.	Clear.	Clear.	Cl'dy. Rain.	Cl'dy. Rain.	Cl'dy. Rain.	Clear.
Depth Rain..	2 2-10			2 5-10	3-10	9-10	
Thermometer.							
Minimum.....	76°	62°	62°	58°	66°	66°	61°
At 8, A. M.....	72	68	67	72	73	69	72
At 12, M.....	73	72	76	76	75	71	80
At 3, P. M....	77	76	76	74	77	72	80
Mean.....	74.50	69.50	70.25	70.	72.75	69.50	73.25
Barometer.							
At 12, M.....	30.	30.3	30.3	30.1	29.9	30.1	30.3

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